



SDMS DocID 2081065



Mitch Cron
Remedial Project Manager
USEPA Region III
Hazardous Site Cleanup Division
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Subject:

Comments on USEPA Proposed Plan for the Bally Groundwater Contamination Superfund Site, Berks County, Pennsylvania

Dear Mr. Cron:

Sunbeam Products, Inc. (Sunbeam) has received the United States Environmental Protection Agency's (USEPA) Proposed Plan (Plan) for the Bally Groundwater Contamination Superfund Site Operable Unit 2 (OU-2), otherwise known as the Bally Public Water System (PWS), dated March 2007. This letter provides Sunbeam's response to USEPA's Plan.

Sunbeam entered into an Emergency Administrative Order on Consent (AOC) with USEPA on September 30, 2003. The AOC required that Sunbeam prepare a Focused Feasibility Study (FFS) evaluating the following two alternatives:

- A. "Installation and utilization of a new municipal well that meets the standards of federal and state SDWA and their implementing regulations to provide a source of drinking water to the Borough of Bally that does not exhibit 1,4-dioxane concentrations in excess of 3.0 ppb." This option would replace the Borough of Bally (Bally) Municipal Well Number 3 with the new municipal supply well.
- B. "Treatment of the water presently produced by Municipal Well Number 3 to achieve one of the following alternatives (i) 3.0 ppb; or (ii) if 3.0 ppb is not practicable and feasible and reasonable achievable on a consistent basis, some other concentration approved by EPA in consultation with the Commonwealth of Pennsylvania, taking into consideration, among other things, cost and limitations on treatment technology to consistently and effectively achieve this concentration as applied in the field at this Site."

ARCADIS U.S., Inc.
6 Terry Drive
Suite 300
Newtown
Pennsylvania 18940
Tel 267 685 1800
Fax 267 685 1801
www.arcadis-us.com

ENVIRONMENT

Date

April 11, 2007

Contact

Michael Bedard

Phone:

267.685.1800

Email:

Michael.Bedard@
arcadis-us.com

Our ref:

NP000597.0002

This alternative would entail treating the water presently produced by Bally Municipal Well Number 3 (MUN-3) to reduce the concentration of 1,4-dioxane to below the specified levels and using the water to supply the Bally PWS with 1,4-dioxane-free drinking water.

After executing the AOC, Sunbeam began to simultaneously evaluate the feasibility of treatment of the existing water supply produced by MUN-3 and explore the feasibility of constructing a new municipal supply well for Bally.

On May 20, 2004 Sunbeam submitted a revised FFS Work Plan to USEPA addressing the comments that USEPA had issued in response to the December 2003 FFS Work Plan initially submitted by Sunbeam. The revised Work Plan provided the plan and general table of contents for the FFS. The two alternatives to be presented in the FFS were described in the revised Work Plan as follows:

1. "Installation of New Municipal Supply Well for the Bally PWS, Continued Operation of Existing Municipal Well No.3 Groundwater Treatment System with Discharge to West Branch Perkiomen Creek (West Branch); and,
2. Continued Operation of Existing Municipal Well No. 3, Additional Treatment of 1,4-Dioxane at Well No. 3, Continued Discharge of Treated Water to Bally PWS and Adjacent Unnamed Tributary."

*Look at work plan
GMA is probably
in it*

USEPA issued no further comments on the FFS Work Plan. Therefore, Sunbeam proceeded to evaluate the alternatives as presented in the approved Work Plan. Alternative 1, construction of a new municipal supply well, was contingent upon obtaining a National Pollutant Discharge Elimination System (NPDES) permitted discharge for the existing MUN-3 groundwater treatment system effluent to the West Branch with no additional treatment for 1,4-dioxane. Alternative 2 evaluated construction of additional treatment for water produced by MUN-3, and included continued discharge to the Bally PWS for potable use. This alternative also included discharge of excess water to the unnamed tributary (UNT) to the West Branch. The UNT is adjacent to the existing MUN-3 treatment system.

*this has been
addressed then and
there*

Sunbeam applied for a renewal of the existing MUN-3 treatment system NPDES permit with the addition of 1,4-dioxane as a permitted and dischargeable compound. In January 2005 the PADEP issued a NPDES permit that specified a final 1,4-dioxane average monthly discharge concentration limit of 112 micrograms per liter

(µg/L) for a discharge to the West Branch, thereby indicating state acceptance of this key component of Alternative 1 (installation of a new municipal supply well) and establishing the 1,4-dioxane surface water performance criterion for the treatment system discharge. Furthermore, in the permit the PADEP delegated the selection of the discharge location, for the existing discharge point or the proposed new discharge point, to Sunbeam. USEPA was copied on the permit issued by PADEP and also on correspondence leading to the issuance of the permit. At no time did USEPA indicate that this discharge was not acceptable to USEPA. As a result, Sunbeam went through considerable effort to identify, obtain access to and test several new well sites as would be required to complete Alternative 1. USEPA was kept advised of Sunbeam's efforts to obtain well site access throughout the process.

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In the Plan issued in March 2007, USEPA includes statements indicating that it could require treatment of the effluent from MUN-3 as well as the disconnection of MUN-3 from the Bally PWS, and the installation of a replacement well to provide potable water to the Bally PWS. This course of action would effectively combine Alternatives 1 and 2 as described in the ARCADIS 2004 FFS Work Plan and 2007 FFS report. The cost for combination of Alternatives 1 and 2 would be close to the addition of their individual present-worth costs. The proposed justification of requiring treatment is not for treatment for drinking water purposes, but to reduce the concentration of 1,4-dioxane discharged to the West Branch, despite the fact that PADEP has issued a NPDES permit for a discharge scenario that does not include 1,4-dioxane treatment.

look @ (NPDES) permit

The evaluation of Alternative 2 (additional treatment to remove 1,4-dioxane from water flowing to the Bally PWS) was initiated in early 2003 following the discovery of the presence of 1,4-dioxane in the Bally PWS.

In accordance with the AOC, Sunbeam has conducted evaluations of the treatability of 1,4-dioxane and has monitored advancements made in treatment technology for public water supplies. This work included the preliminary evaluation of broad treatment types to identify what technologies were best suited for treatment of 1,4-dioxane. Based upon the results of this preliminary screening, Advanced Oxidation Processes (AOP) was selected as the best available treatment technology suite for 1,4-dioxane in a municipal water supply setting.

In August 2003, Sunbeam submitted a letter report to USEPA summarizing the results of the preliminary screening and bench scale testing conduct to evaluate

Alternative 2 (Continued operation of Municipal Well No. 3 Treatment system with additional 1,4-dioxane treatment and discharge to the Bally PWS and UNT to the West Branch). This document detailed the comprehensive review of the available treatment technologies. In summary, the bench scale technology review and testing indicated that the technologies were unproven in a high flow municipal water supply setting such as the Bally PWS. Furthermore, the bench scale testing indicated that UV-peroxide and ozonation technologies both produced treatment byproducts, specifically aldehydes (including formaldehyde) for UV-peroxide treatment and bromate for ozonation.

Additionally, a review of information collected for municipal water supply systems using AOP to treat water entering a PWS revealed that AOPs are not used to remove concentrations of 1,4-dioxane from groundwater at the concentrations observed in the Bally PWS. The lack of a sufficient track record for 1,4-dioxane treatment in municipal supply settings caused concern with the ability of the treatment technology to efficiently, constantly and reliably treat 1,4-dioxane to concentrations in the single digit µg/L range for discharge to the Bally PWS or to the UNT. This information was reiterated to the USEPA in the Bally Groundwater Contamination Superfund Site Final FFS submitted to EPA in February 2007.

Statements by USEPA in the Plan indicating that the MUN-3 treatment system discharge location and treatment mechanism will be selected as a separate matter (outside the FFS) is of serious concern to Sunbeam. The statement contradicts verbal statements by USEPA and the Borough of Bally indicating that both preferred the installation of a new well, instead of treatment of MUN-3 water for use in the Bally PWS. This approach, combining both Alternatives 1 and 2, is inconsistent with the 1989 ROD, the AOC and the FFS Work Plan prepared in accordance with the AOC. Installation of 1,4-dioxane treatment on the MUN-3 groundwater treatment system for discharge to surface water purposes, rather than for treatment of the Bally PWS, would be contrary to the requirements of the AOC, EPA's conclusions in the Five Year Review report, and the ROD (where the discharge requirements are delegated to the PADEP). Importantly, if USEPA selects the discharge location and treatment mechanism as a separate matter, then USEPA would circumvent the CERCLA FFS process by selecting an option not evaluated against the nine evaluation criteria specified in USEPA's Feasibility Study Guidance documents. By ignoring the nine criteria, the Feasibility Study process is invalidated as the comparison of the remedies based upon a technical, regulatory, legal, environmental and economic basis is rendered meaningless.

reference
concerns
by OHA

why?

more & more
why?

should be included

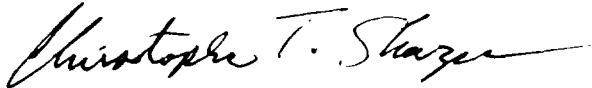
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In summary, Sunbeam is very concerned about USEPA's decision to separate the selection of the discharge location from the remainder of the remedy selection. This decision is contrary to the requirements of the ROD issued in 1989, the AOC signed by Sunbeam in 2003, and it invalidates the remedy selection process inherent in the preparation of a Focused Feasibility Study.

Sincerely,

ARCADIS U.S., Inc.



Christopher T. Sharpe
Project Hydrogeologist



Michael F. Bedard, P.E.
Project Manager

Copies:

Roger Reinhart, USEPA
Asuquo Effiong, PADEP
Susan Werner, PADEP
Chris Ann Gahagan, EnLibra, LLC
Lorelei Borland, Jarden
Rick Mowrey, Jarden
Borough File, Borough Bally



Infrastructure, environment, facilities

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Imagine the result

AR301485

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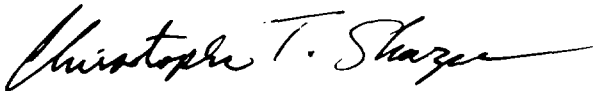
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